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EXAMINER

PWU, JEFFREY C

ART UNIT PAPER NUMBER

2143

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/656,538

Applicant(s)

LEE ET AL.

Examiner

Jeffrey C. Pwu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,18 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,18 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 5 and 6 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

For a claim to be statutory under 35 USC 101 the following two conditions must be met:

- 1) In the claim, the practical application of an algorithm or idea result in a useful, concrete, tangible result, AND
- 2) The claim provides a limitation in the technological art that enables a useful, concrete, tangible result.

As to the technology requirement, note MPEP Section iV 2(b). Also note In Re Waldbaum, 173USPQ 430 (CCPA 1972) which teaches "useful arts" is synonymous with "technological arts". In re Musgrave, 167USPQ 280 (CCPA1970), In re Johnston, 183USPQ 172 (CCPA 1974), and In re Toma, 197USPQ 852 (CCPA 1978), all teach a technological requirements.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding claims 1, 5, 6, and 21, the phrase "should be" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

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***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 3-~~6~~, 18 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Kumar (U.S. 6,269,080).

Kumar discloses claims:

1. A method of multicasting information to a set of clients comprising:  
constructing a data topology associated with the set of clients based on performance information associated with the set of clients; (abstract)  
determining a primary client using performance information and a network location of the client, the network location relating to the data topology; (col.3, line 67-col.4, line 35)  
transmitting a first portion of the information to the primary client from a server; (FDSP server to FSDP clients)  
instructing the primary client to forward the first portion of the information to a secondary client; (method steps of 400, steps 401-406) and  
in the event a new client is added to the set of clients:

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receiving new performance information associated with the new client; (col.6, line 23-44)

determining based at least in part on the new performance information whether the new client should be used instead of the first primary client to forward multicast information to the secondary client; and (fig.6)

in the event it is determined that the new client should be used instead of the first primary client to forward multicast information to the secondary client, designating the new client as a new primary client to be used to forward information a subsequently sent portion of the information, if any, to the secondary client. (fig.9)

2. A method of multicasting information to a set of clients as recited in claim 1 further including receiving performance information from the set of clients. (see feedback of FDSP server of figs. 6 & 9)

3. A method of multicasting information to a set of clients as recited in claim 1 further including pinging clients to determine the network location of the clients. (606, 914)

4. A method of multicasting information to a set of clients as recited in claim 1 wherein the information is streaming video. ("multicast data inherently includes streaming video")

5. A method of multicasting information to a set of clients comprising:  
determining a performance parameter for each of the clients; (col.6, lines 60-63)

constructing a data topology associated with the set of clients based on the performance parameter associated with each of the clients selecting a subset of the clients to be primary clients based on the performance parameter and a network location relating to the data topology; col.6, lines 25-63)

transmitting the information to the primary clients for retransmission to other clients in the set of clients; and (FSDP clients)

in the event a new client is added to the set of clients:

receiving new performance information associated with the new client; and determining based at least in part on the new performance information whether the new client should be a primary client. (see feedback mechanisms of figs. 4,6,9)

6. A method of multicasting information to a set of clients comprising: constructing a data topology associated with the set of clients based on performance information associated with the set of clients; determining a network location for each of the clients; determining a primary client using performance information and the network location of each of the clients, the network location relating to the data topology; selecting a subset of the clients to be primary clients based on the network location and the performance information;

transmitting the information to the primary clients for retransmission to other clients in the set of clients: and in the event a new client is added to the set of clients: receiving new performance information associated with the new client; and determining

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based at least in part on the new performance information whether the new client should be a primary client. (Claim 6 is similarly rejected as in claims 1 & 5)

18. A server configured to multicast information to a set of clients comprising: a client interface configured to transmit the information to a primary client from the server and to instruct the primary client to forward the information to a secondary client; and logic configured to: construct a data topology associated with the set of clients based on performance information associated with the set of clients and to determine a primary client using performance information and a network location of the client, the network location relating to the data topology; and in the event a new client is added to the set of clients, update the primary client determination based at least in part on a new performance information associated with the new client. (Claim 18 is similarly rejected as in claims 1 & 5)

21. A computer program product for multicasting information, the computer program product being embodied in a computer readable medium and comprising computer instructions for:

constructing a data topology associated with the set of clients based on performance information associated with the set of clients; determining a primary client using performance information and a network location of the client, the network location relating to the data topology; transmitting a first portion of the information to the primary client from a server; and instructing the primary client to forward the first portion of the

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information to a secondary client; and in the event a new client is added to the set of clients: receiving new performance information associated with the new client; determining based at least in part on the new performance information whether the new client should be used instead of the first primary client to forward multicast information to the secondary client; and in the event it is determined that the new client should be used instead of the first primary client to forward multicast information to the secondary client, designating the new client as a new Primary client to be used to forward information a subsequently sent portion of the information, if any, to the secondary client. (claim 21 is similarly rejected as in claim 1)

### ***Response to Arguments***

6. Applicant's arguments with respect to claim 1, 3-5, 18 and 21 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not



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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey C. Pwu whose telephone number is 571-272-6798.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



8/2/05

JEFFREY PWU  
PRIMARY EXAMINER